

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

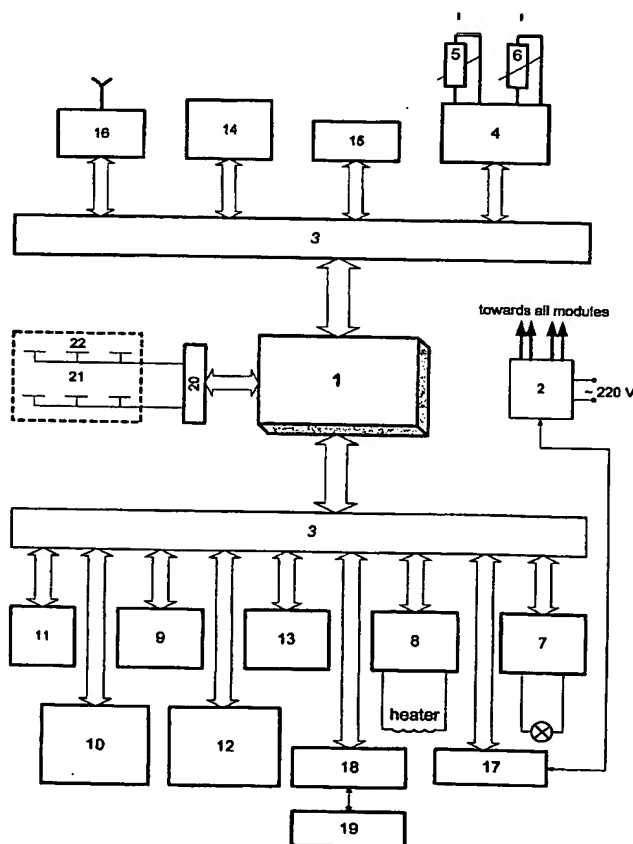
PCT

(10) International Publication Number
WO 2004/111561 A1

- (51) International Patent Classification⁷: **F25D 29/00**, G06F 17/60, G07F 5/18
- (21) International Application Number: **PCT/BG2003/000028**
- (22) International Filing Date: **18 June 2003 (18.06.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (71) Applicant (for all designated States except US): **BRATYA VASSILEVI AD [BG/BG]**; bul. "Dondukov", No 32, 1000 Sofia (BG).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **VASSILEV, Vasil, Panayotov [BG/BG]**; ul. Oborishte, No 33, 1504 Sofia (BG). **TODOROV, Assen, Markov [BG/BG]**; J.k. "Krasna polyana, bl.36A, en.B, ap.40, 1330 Sofia (BG).
- (74) Agent: **BENATOV, Emil, Gabriel**; Dr. Emil Benatov & partners, Liuliakova gradina Str., bl. 36B, 1113 Sofia (BG).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: **REFRIGERATOR AND SYSTEM OF REFRIGERATORS**



(57) Abstract: The refrigerator and the system are applicable in hotels and chains of hotels. The refrigerator has a high degree of intelligence and is convenient for servicing. The system enhances the efficiency of servicing numerous refrigerators in one or several hotels. The refrigerator R comprises a conventional microprocessor system 1, which by means of a conventional complex two-directional bus 3, is connected to modules for reading, monitoring and controlling various functions of the refrigerators. By means of a buffer 20, the microprocessor system 1 is connected to sensors, arranged within the refrigerator operation space for detection of the position 21 and the kind, price and expiry date 22 of the contained products. Transponders 23, recognizable by the sensors 22, are positioned onto the products that are supplied to the refrigerator at locations where the sensors 23 are arranged. The system of refrigerators comprises N refrigerators R connected to each other by means of N multi-channel communication lines and to a hotel coordination center 24.



Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.